

February 2
1893
Double Number

“One Hundred ♦ ♦ Health Hints.”

Written by Prof. ROBERT J. ROBERTS, the originator of the famous “Roberts Dumb-bell Drill.”

A copy of this little volume will be presented to young men visiting the Gymnasium of the Boston Young Men's Christian Association, cor. Berkeley and Boylston Streets. Open every week day from 8 A. M. to 10 P. M.

JAMES L. GORDON,
General Secretary.

GEO. ALLEN, JR.,
Secretary Main Department.

THE HOTEL HUNTINGTON, COPLEY SQUARE AND HUNTINGTON AVENUE.



Offers large and pleasant outside rooms, from \$7.00 per week upward.

Dining rooms conducted on both American and European systems.

At reasonable rates.

LEVI B. GAY, PROPRIETOR.

FREDERIC LORING, Manager.

ARTHUR S. DOANE & CO.,

ENGRAVERS AND STATIONERS,

27 KILBY STREET,

BOSTON.

WEDDING AND VISITING CARDS.

GENERAL ELECTRIC COMPANY.

EDISON AND THOMSON-HOUSTON SYSTEMS.

Electric Lighting. Electric Power. Electric Railways.

SEND FOR OUR CATALOGUES

BRANCH OFFICES:

620 Atlantic Avenue, Boston, Mass.

173, 175 Adams Street, Chicago, Ill.

264 West Fourth Street, Cincinnati, O.

Gould Building, Atlanta, Ga.

42 Broad Street, New York.

509 Arch Street, Philadelphia, Penn.

401-407 Sibley Street, St. Paul, Minn.

Masonic Temple, Denver, Col.

15 First Street, San Francisco, Cal.

YOUNG
MEN'S
SHOES

OF EVERY DESCRIPTION.

Fashionable, Durable, and Moderate in Price.

Co-operative discount to students of Tech.

Thayer, McNeil & Hodgkins,
47 TEMPLE PLACE, - - - BOSTON.

THE CRAWFORD SHOE

IS MADE EXPRESSLY FOR GENTLEMEN.

WHEN WE MAKE THE ABOVE ANNOUNCEMENT WE MEAN JUST THIS:

**It is made in Proper Style,
Of the Best of Material,
By the Best Workmen we can Hire.**

It is not, like hundreds of factory-made shoes, made for shoe dealers to sell at \$3.00 or \$4.00 through extensive advertising.

We do an immense business in Boston, New York, Philadelphia, and other large cities on our Crawford Shoe alone, and we do it on the GOOD REPUTATION of our shoe.

Think of this, visit one of our stores, and examine the shoes for yourself. They are JUST AS GOOD as they look.

CRAWFORD SHOE STORES IN BOSTON.

611 WASHINGTON ST., opposite Globe Theatre.
225 WASHINGTON ST., next door to Thompson's Spa.
Under UNITED STATES HOTEL, cor. Kingston St.
56 MAIN ST. (Charlestown Dist.), Boston.

45 GREEN ST., near Bowdoin Square.
20, 22 and 24 PARK SQUARE, near Providence Depot.
182 and 184 BOYLSTON ST., near Columbus Avenue.

BOUVÉ, CRAWFORD & CO. Corp., Maker.

BOOKBINDING

IN EVERY STYLE.

ALEX. MOORE, 3 School Street, BOSTON.

HOMEWARD BOUND.

BY SEA AND RAIL.

The Norfolk Route.

The palatial steamships of the Norfolk Route ply semi-weekly and direct between

BOSTON, NORFOLK AND BALTIMORE,

Sailing from Central Wharf, Boston,

Every Tuesday, Thursday and Saturday, at 2 o'clock P. M.

Connecting with Rail and Water Routes for Washington, D. C., the South, Southwest, and Pacific Slope.

You are respectfully invited to inspect our steamers, and see for yourself the accommodations offered.

C. P. GAITHER,
Soliciting Agent,
290 Washington St.,

A. M. GRAHAM,
Agent,
Central Wharf.
BOSTON, MASS.

ALL RAIL.

The Shenandoah Valley Route.

The Shenandoah Valley Route connects with all lines from Boston to New York, and thence is via the world-renowned Pennsylvania Railroad, or picturesque Baltimore & Ohio, passing through Philadelphia, Harrisburg, Hagerstown, Antietam Battlefield, Old Charlestown, made famous as the place where John Brown was executed, or Washington, Shenandoah Junction, the wonderful Caverns of Luray, the historic Natural Bridge, on to Roanoke and the magic cities of the New South, Bristol, Knoxville, Chattanooga, Nashville, Decatur, Florence, Sheffield, Corinth, Grand Junction, Memphis, Little Rock, and Texas.

Kansas City, Colorado, Utah, and the Pacific Coast.

Chattanooga, Fort Payne, Birmingham, Meridian, Vicksburg, Shreveport, Texas, —Cleveland, Tennessee, Dalton, Rome, Anniston, Calera, Selma, Montgomery, Mobile, New Orleans, Old and New Mexico, and the Pacific Coast.

Atlanta, Macon, Jesup, Brunswick and Florida.

Through Pullman Car service from New York, Washington and Norfolk, to Roanoke, Louisville, Knoxville, Chattanooga, Nashville, Memphis, Birmingham, New Orleans,

C. P. GAITHER, N. E. Agt., 290 Washington St., Boston.

PRIEST'S

DINING ROOMS.

100 and 102 DARTMOUTH STREET.
397 COLUMBUS AVENUE.

Mr. HALE'S SCHOOL FOR BOYS,

5 Otis Place, Boston.

Prepares for the Institute of Technology
and for Harvard College.

Inquire of the former pupils of the school
who are now in the Institute in regard to
the preparation given.

yes
**Holland-
No 611 - Studies
Washington Street
- Boston -**

**ARTISTIC
PHOTOGRAPHY.**

CRAYONS.
WATER COLORS.
PASTELLES.

Take Elevator.

Easy of Access.

Centrally Located.

Occupying the large and commodious rooms com-
prising the entire top floor of the building at 611 Wash-
ington Street, opposite the Globe Theatre, where we have
the largest and best northern light in the city of Boston.

At the new studio we have every facility for sustain-
ing our reputation as excelling in "group pictures."

THE UNION GYMNASIUM 48 BOYLSTON ST. BOSTON.

SEASON OF 1892-93.

The Union Gymnasium opens October 10th,
after extensive repairs and additions.

Latest Sanitary Plumbing.

Entirely new and **improved bathing
facilities** and **new apparatus**, part of
which has never before been introduced into any
gymnasium, making it the most **completely
equipped** and largest gymnasium in Boston.
It is above the street level and open to light and
air on every side.

Cards with full particulars may be had upon
application.

TERMS.

Including the Union Membership (One Dollar), and en-
titled to all its privileges.

For One Year, use of Gymnasium after 7.00 P. M., and on holidays for such time as it may be open,	\$5.00
For One Year, use of Gymnasium at all times when open	\$8.00
Keys, to be refunded on return of same	.50

JAMES W. MONTGOMERY	Supt.
GERMAN F. HOFFMAN	Asst. Supt.
EDWARD O. OTIS, M.D., (Harv.)	Medical Director.

GEORGE PEIRCE, Sec'y.

WM. H. BALDWIN, Pres.

DRAFTING INSTRUMENTS

DRAWING AND BLUE PROCESS PAPERS

Selected with especial reference to the requirements of Students of the Institute.

Scales, Triangles, Curves, T Squares, Etc.

WADSWORTH, HOWLAND & CO.,

82 AND 84 WASHINGTON STREET, BOSTON.

SPECIAL RATES TO STUDENTS.

267 STATE STREET, CHICAGO

L. P. HOLLANDER & CO.

NEW · AND · CORRECT · STYLES · FOR · FALL · AND · WINTER.

Merchant Tailors. Fine Ready-Made Clothing.

HIGH-CLASS · FURNISHING · GOODS. ENGLISH · AND · AMERICAN · HATS · AND · CAPS.

Best Goods at Very Reasonable Prices.

202-212 BOYLSTON STREET and PARK SQUARE, BOSTON.

Frank Wood,
Printer,

352 Washington Street, Boston.

SPECIAL RATES TO STUDENTS!

F. J. KALDENBERG CO.,

MANUFACTURER OF

Meerschaum and French Briar Pipes, Cigar and Cigarette Holders,
AND AMBER GOODS.

Walking Sticks, mounted in Gold, Silver, Ivory and Buckhorn.

CLASS CANES,

Made and Mounted after any Design.

PIPES BOILED, REPAIRED, AND MOUNTED IN GOLD AND SILVER.

Repair Work and Engraving done on the premises.

338 WASHINGTON STREET.

ELECTRIC MOTORS	Thomson-Houston	THE ONLY
... FOR ...		Practical and Successful Systems
ALL POWER PURPOSES.	Motor Co.,	... OF ...
ELECTRIC	620 Atlantic Ave.,	Electric Tramways
Hoisting Apparatus.	BOSTON, - MASS.	... ARE THE ...
		EDISON AND THOMSON-HOUSTON.

DANCING.

WALKER'S PRIVATE ACADEMY,
No. 24 DWIGHT STREET,

Evening Classes from Oct. 1st to May 1st.
 Private Lessons daily from 10 to 6.

☞ Please call or write.

Drawing Boards, Papers,
Inks, Pens, Instruments, and Fountain Pens
 At Discounted Rates.

A. D. MACLACHLAN,
 Tech. Co-operative Store,
 214 Clarendon St., - - Boston, Mass.

The Electrical Engineer.

A Weekly Review of Theoretical and Applied Electricity.

ARE YOU a STUDENT, an ELECTRICAL ENGINEER, an ELECTRICAL EXPERT, or in any way interested in Electricity? In any case you will find THE ELECTRICAL ENGINEER an interesting and useful weekly visitor. It is the oldest general electrical journal in America, and the leader in technical excellence and enterprise.

THE ELECTRICAL ENGINEER is in magazine form, convenient for reading, preservation and binding, and is amply and artistically illustrated. It is always up to date with electrical progress. Subscription, \$3.00 per year.

Address

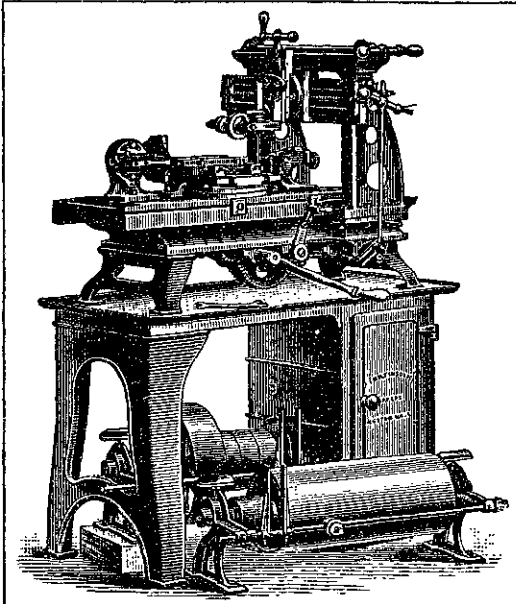
The Electrical Engineer,

203 Broadway, New York.

Subscriptions received at special student rates by the Editors of "The Tech."

A PRACTICAL
Hand or Power Planer

INSPECT OUR STOCK
—OF—
MECHANICS' TOOLS.



CALL AT OUR STORE
—AND—
Examine Reed Lathes.

A Large Assortment of Steel Rules,
Calipers, Dividers and Small Tools.

A. J. WILKINSON & CO.,

184 and 188 Washington Street,
BOSTON, MASS.

SAMUEL USHER,
PRINTER,

NUMBER 171 DEVONSHIRE STREET,
BOSTON, MASS.

All kinds of School and College Printing for Classes and
Fraternalities executed promptly, and in the highest style of the
art, at reasonable rates.

ESTIMATES CHEERFULLY FURNISHED.

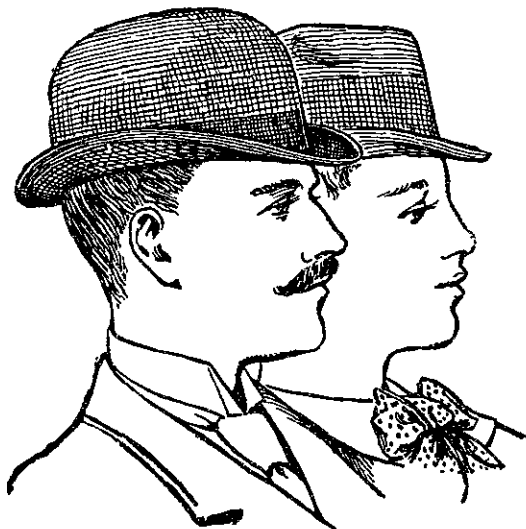
BANJO AND MANDOLIN.

G. L. LANSING,

Teacher, and Director of Clubs,

58 A WINTER STREET, BOSTON.

BEST INSTRUMENTS CONSTANTLY IN
STOCK. MUSIC, STRINGS, ETC.



OUR
CHESTERFIELD,
\$3.

OUR
HARVARD,
\$2.

Two new styles of hats for young men and
youths in the correct shapes for Fall and early
Winter. Blacks, Seal and English Browns,
Pearl, Tan and Tobacco shades.

HAT DEPARTMENT.

A. SHUMAN & CO.,

BOSTON,

CLOTHIERS and OUTFITTERS.

ABRAM FRENCH CO.,

89, 91 and 93 Franklin Street,

IMPORTERS OF

China, Glass and Fancy Pottery.

Wedding and Birthday Gifts

A SPECIALTY.

ALL THE LATEST
PATTERN,

RICH CUT GLASS.
DINNER SETS,

From the Lowest Cost
to Highest Grade.

WE ARE THE LARGEST IMPORTER OF HAVELAND &
CO.'S FRENCH CHINA IN THE UNITED STATES.

Reasonable prices in our entire stock.

ABRAM FRENCH CO.

New Pictures.

Etchings, Engravings, Photographs, just received from the best American, English, French, and German publishers.

The largest and finest stock to select from in New England,—and prices satisfactory.

Special attention to Artistic Framing.

WILLIAMS & EVERETT,
190 Boylston Street, - - Boston.



J. C. LITTLEFIELD,
Tailor and Outfitter,

21, 23 BEACON ST., BOSTON.

Exclusive Styles for Young Men.

DRESS SUITS A SPECIALTY.

DISCOUNT TO STUDENTS.

FROST & ADAMS, — Importers of — **DRAWING INSTRUMENTS**

AND

Supplies for Students, Architects, and Engineers.

SEND FOR ILLUSTRATED CATALOGUE.

No. 37 Cornhill, Boston.

LIBERAL DISCOUNT TO M. I. T. STUDENTS.



"TECH" SPECIAL.

WE ARE

TAILORS TO THE TECH CO-OPERATIVE SOCIETY.

EXCLUSIVE LONDON STYLES

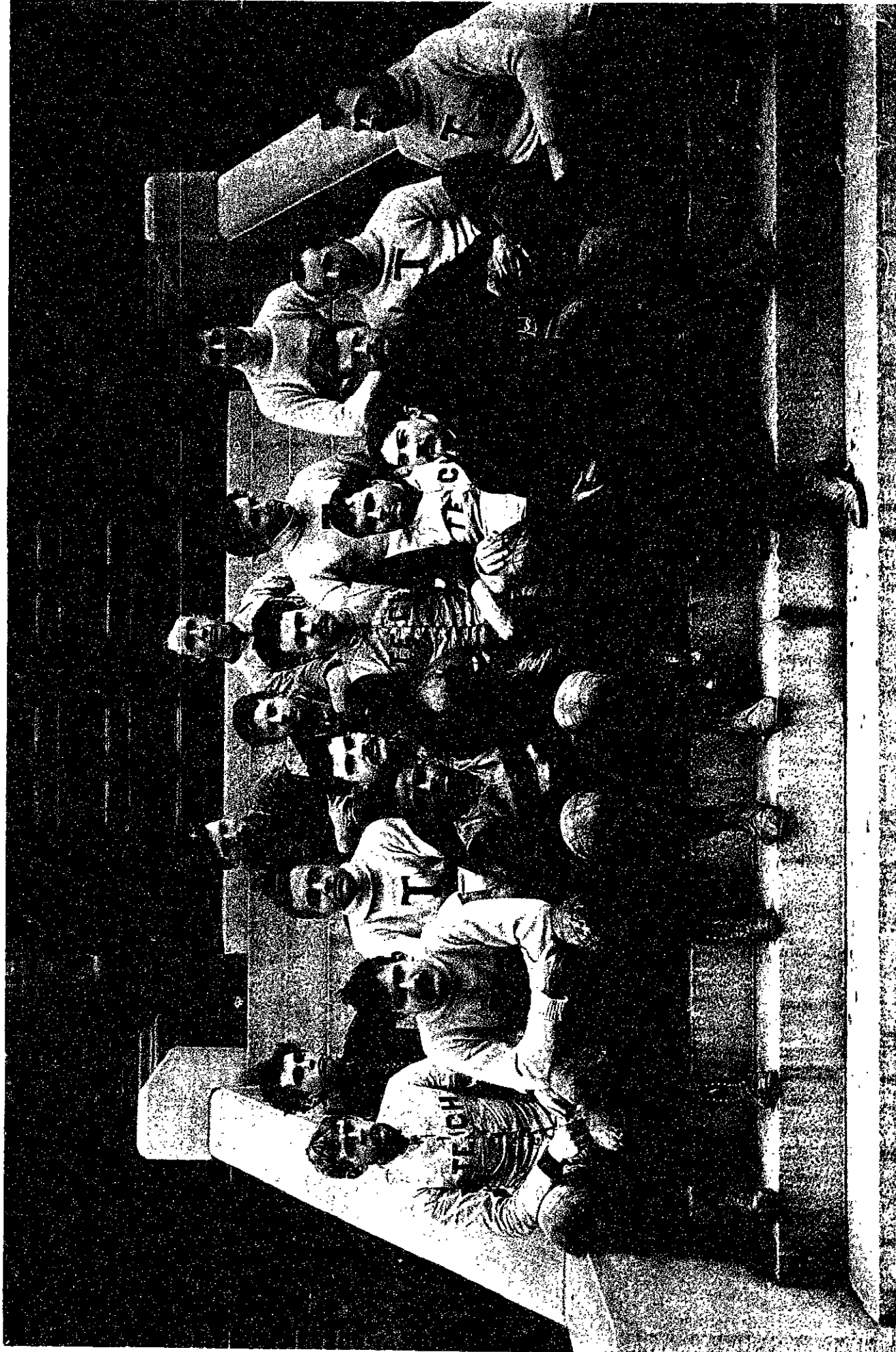
For students' wear our specialty, with prices moderate.
Inspection solicited.

All goods warranted for excellence of make and superiority of colors.

MESSINGER BROTHERS & JONES

TAILORS AND IMPORTERS,

No. 388 Washington Street, Boston.



VARSITY FOOTBALL TEAM.
SEASON OF '92.

The Tech.

VOL. XII.

BOSTON, FEBRUARY 2, 1893.

Double Number

THE TECH.

Published every Thursday, during the college year, by the students of the Massachusetts Institute of Technology.

BOARD OF EDITORS.

HARRY LAWSON RICE, '93, } *Editors-in-Chief.*
RAYMOND BEACH PRICE, '94, }
FREDERICK HOPPIN HOWLAND, '93.
ALBERT FARWELL BEMIS, '93.
FREDERIC WAIT LORD, '93.
JAMES RAMSEY SPEER, '93.
HAROLD ANTHONY RICHMOND, '93.
JULES GODCHAUX, '93.
COLBERT ANDERSON MACCLURE, '94.
ANDREW DANIEL FULLER, '95.
EDWARD LEBER, '95.
CHARLES GILMAN HYDE, '96.

ANDREW DANIEL FULLER, '95, *Secretary.*

CHARLES REAY KNAPP, '94, *Business Manager.*
CHARLES ROYCE BOSS, '93, *Assistant Business Manager.*

Subscription, \$2.50 per year, in advance. Single copies, 10 cts. each.

FRANK WOOD, PRINTER, 352 WASHINGTON STREET, BOSTON.

THE great man whom the world loved and respected, the great preacher, the kindly friend, has gone; and the world mourns. No single organization, no single sect, can claim him; he was the world's, and all creeds, all nations, all men, now join hands in sympathy and sorrow. We men of Technology have a peculiar interest, feel a peculiar sorrow in the death of this great divine, in that he has been for so many years so closely identified with the hopes and joys and fears of our graduating classes. For the last few years, the late Bishop has been the baccalaureate preacher to this Institute. No official record has been kept of these valuable services. "It was always," says President Walker, "an arrangement between him and the students," yet the memory of hundreds of our graduates will go back to the simple, kindly, and yet inspired words with which he welcomed them to the life work awaiting. That our institution had no claim upon him made no difference; this man of men in all his busy life had time for all, for everything, where he felt that a service was to be done, a mission to be effected. No

student coming to Boston for the first time ever went to him in vain, and many of our men can testify to the kindness with which he has thus received them. The world's loss is our loss; for the greatest, the noblest man ever connected with our Institute, the immortal Phillips Brooks, has gone, and his place can never be filled.

THE Institute will have an exhibit at the World's Fair. It is proposed that the Institute and Harvard shall represent the colleges of the East. The Faculty have accordingly appointed a committee to take the matter in hand, and the work is progressing rapidly.

The space allotted us is twelve hundred square feet, rather small to give a complete idea of our great institution, but by careful selection it will no doubt be possible to cast a shadow over our competitors. More space was originally given us, but it was, through the generosity of the Institute, given to the public schools.

As yet the exhibit has not been definitely laid out, but the scheme is, naturally, to represent each course as faithfully as possible. Photographs of the laboratories, instruments, machines, and buildings will constitute a part; and these, together with samples of work done by students, and the theses of the graduating class of last year are the means by which the scheme will be carried out. When the work of collecting is finished, the whole will be set up in some convenient place for the approval of those at the head of the courses. Some competent person will be in charge of the exhibit, and it is hoped a register will be provided for the students who visit Chicago next summer.

The work of arranging the exhibit will be watched with much interest, and THE TECH will keep its readers informed upon the subject.

HERE seems to be something unsatisfactory about the present manner of choosing a course. A Freshman is too often influenced by the decision of those about him, or by the desire to become a member of the most popular course. Certainly every man is perfectly free to choose what line of study he most desires to pursue, and is perfectly at liberty to speak and act for himself in this matter; still it would seem as though some slight attempt should be made to regulate the percentage of men in the different departments according to the demand for one class or another of graduates. Men come to the Institute, in general, to learn a profession, and it is very much to their advantage to be able to obtain a lucrative position after graduation, taking up that class of work for which they have here prepared themselves, provided they enjoy it. It is most encouraging to a man to find himself available for one or two good positions, and it is quite as discouraging after four years of hopefulness and hard work to find that his knowledge and his degree are of no assistance to him in obtaining a situation.

Let us take, for an example, the first course in the Institute—Civil Engineering. For the past three years there have been many more applications for graduates from this course than there have been men available. In some years the number of applications has been very nearly double the number of graduates, and yet the department has not made the least endeavor to obtain these applications. Last year there were thirty-one available men and thirty-six positions offered. Twelve of these men found positions for themselves, two went abroad, and the remaining seventeen were left with the thirty-six positions to choose from. Mr. Mendenhall, who lectured in the Lowell Free Course of lectures a short time ago, said that he could find good positions for fifty good men annually. Such statistics would be of very great importance to some students.

We have given the condition of affairs in but this one course, as we do not feel that we

strictly have the authority to publish at this date any further investigations in the matter. Some of the departments would show a high efficiency in this respect, and some would show a low. At all events, authorized statistics of this sort in regard to each professional course, would, we believe, aid much in the proper distribution of men among the several departments.

WITH the weekly TECH fairly well started on its career toward success, the retiring Senior editors can look with complacency on its future prospects. The Editorial Board has been increased to safe proportions, and a good man has been chosen to lead it. Mr. Price needs no introduction to the majority of Tech men, and it is sufficient to record here the assurance that his associates feel that a successful future awaits this paper under his guidance. The policy of THE TECH will undergo no change; it will continue to be, as heretofore, the exponent of student opinion, only it will try to be this in a better and still more universal way. THE TECH has been far from perfect during the past term. It is doubtful if it has even reached the standard of former volumes; but it has perhaps been, and this will be sufficient praise, as successful as might have been expected considering the new departure that has been inaugurated. It has suffered, as it has always done, from lack of co-operation among the student body. It has overcome but partially the long standing indifference among the members of the Faculty; but the efforts that have been made to overcome these obstacles will not be discontinued, and must some day reap success.

THE TECH also suffers under a popular apprehension that it is a money making affair, an impression than which no other could be more dangerous or more difficult to successfully combat in a community like ours. It is useless to deny it; it will remain, and yet it is not true. THE TECH is of the students, and for the students only. Any man who has ability is

welcome to its Board, but he need not come there expecting pecuniary gain. Every cent of THE TECH's money goes into THE TECH, except what may be given to the various needy organizations throughout the Institute. If there was more money, if there were more subscribers, the paper would be larger, and the great Columbia College success of two weekly papers of over twenty pages each would be repeated. The men of the Institute little know that there was not a single issue last term which could not easily, more easily in fact, have been increased to ten, or twelve, or fourteen pages had our resources warranted the additional expense. This is a point for Technology men to well consider.

It would be good, indeed, if our community could be educated into more appreciation of the work done by the men whose names appear on the title page of this paper. No work in the Institute requires more sacrifice, and none wins less acknowledgement. Think well, you Institute men, the next time a criticism, a harsh word rises to your lips, whether a kind one has ever been there before it; consider well in your indifference whether some praise would be amiss; reflect on the sacrifice of the men who give so much for nothing; and ask yourselves what you have done to help. Reflect, you members of our respected Faculty, whether you co-operate enough in this good work, whether a word of thanks and appreciation given yearly for the paper which is so freely sent you would be out of place. And then when we have all become thus educated, our Editor after he takes full charge next week will not be led to say, as so many have said before him, that no position in Technology is so arduous, so thankless, so devoid of honor, as that of Chief Editor of THE TECH.

H. L. RICE.

“WHAT is the matter with your examination system,” asked a friend the other day, “that you men who work so hard during all the term have to grind so at the end?” And

we repeat it. What is the matter? The Institute examination system, as it stands today, is a wonderful creation to be sure. In as many days our men are required to pass from eight to thirteen examinations, subject succeeding subject with such rapidity that the best trained brain may well become bewildered. The college man who thinks himself somewhat burdened with his four or five examinations in nearly as many weeks, the law school or medical man, with his two or three, may well look with amazement on our wonderful system and breath a sigh of relief that he is not included in its boundaries.

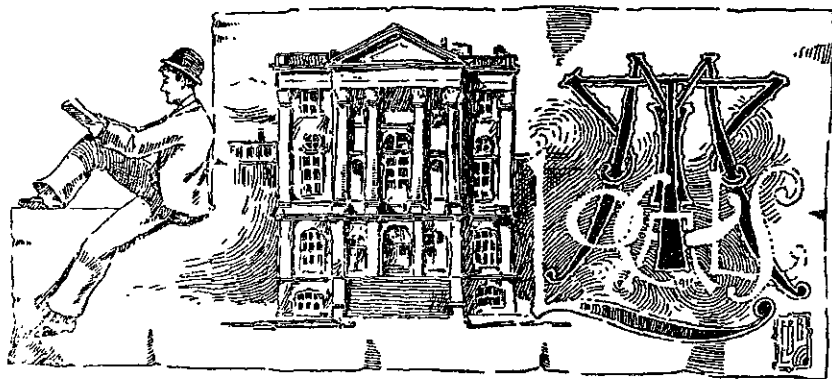
But what is the reason even in view of this, that our men who work day and night throughout the term, who would seem therefore to be well prepared, must spend hours and hours in grinding and review, passing from examination room to study table and burning midnight oil with such decided vengeance? Why is it that we hear of this and that man whom we know to approach most nearly of us all to the Faculty's “Average Student” spending a whole night in final preparation?

Two undeniable facts present themselves in answer. The first is the laxity among the students themselves in regard to lecture work, the almost universal tendency to let the work in lecture courses slide until the end. Not strange perhaps in view of the daily requirements of our Institute, but still a matter for the students themselves to regulate.

The second fact regards the examiners. We men of Technology are here to study principles, and to learn where to find, where to look for, the facts we shall need in our after career. And we must protest against this tendency at the Institute to force us to become, before each examination, a temporary encyclopædia of tables, formulæ, and bald statements of fact. These are what our students grind up before each and every examination now a days, and these are what they proceed to forget again, only to make room for more to be used at later date.

Take two conspicuous examples in the fourth year. Professor Lanza dilates yearly to his men on the folly of memorizing formulæ, but at the same time requires them to become walking handbooks of tables and figures. Professor Richards, one of the best liked professors we have, in his paper in Metallurgy of Iron the other day, made two questions out of the ten depend on the bald knowledge, not the idea, but an absolute knowledge of specific figures.

These are enough, but there are many more instances; and as long as this cause of causes exists, our men will continue to grind, and forget, and grind again, as usual. Principles, gentlemen, not figures.



Wasn't in it! Business Law.

The Lounger's vacation was too much for him.

Vorce, '88, Course I., is principal assistant engineer on the Lake Shore Road.

Charles Wood, '86, Course I., is now chief engineer of the C. H. & D. R. R.

In our last issue Mr. Simonds, '93, was erroneously classed with '94.

Read in the College Notes what the *Oberlin Review* so wisely says about TECH.

How was it that the petition regarding the exam. in Heat and Ventilation was not granted? Papa, you have fooled us.

Mr. George Dadmun, '92, is spending a few days in town. He is engaged with the Baldwin Locomotive Works of Philadelphia.

Owing to the indecision concerning the new instructor in design, the theses subjects have not yet been selected by the fourth-year Architects.

The Sophomore never knows what work really is until he has struck his second semies. How many have been weighed in the balance, etc.

H. M. Waite, '90, Course I., is now in charge of the maintenance of way over two hundred and fifty miles of track on the "Big Four."

Imagine the thoughts of the Freshman who, on the Sunday after the exams. attended a lecture entitled, "We shall all, ere long, emigrate."

G. W. Hayden and Gardner Abbott have been appointed to serve with Mr. Tillinghast as '95's representatives on the Institute Committee.

Now let everyone work for the best Technique ever to be produced. Work for the prizes, work for the honor, but best of all, work for the welfare of the Institute!

It was erroneously stated in our report of the Class Day election that Messrs. Thomas and Houck were not Society men. Both are members of the D. U.

Tech men were numerous at the theaters last week, and almost every night a goodly number could be counted. The second balconies seemed very popular.

The petition to the Faculty by the Junior Architects for more free-hand drawing has been granted. This term they will have four hours a week of it, instead of none, as heretofore.

Mr. Currier (in American history examination): "Gentlemen, you will please hand in, together with the book, the examination paper, and mark upon it clearly the questions that you have answered."

It is interesting to listen to the new display of eloquence on the part of the students in Business Law. Let the good work go on, Mr. Brandeis, and we shall have a debating club yet!

In spite of the presence of the new machine, Professor Lanza still looks with affection on his old 50,000 pound apparatus, which has aided him, as all will recall, in "revolutionizing the tests on beams."

First Tech man: "I say, my boy, what has happened to your mouth, it is all out of shape."

Second Tech man, '93: "Yes, I know it; I tried to read aloud last night from our new book on Heat. and Vent."

At the annual meeting of the board of editors of THE TECH, Mr. Price, '94, was elected to succeed Mr. Rice, '93, as editor in chief. This incident, we assure you, did not occasion the rise in price of this edition.

Many a raffle now takes place in the top Civil drawing rooms. First and second prizes are given from the nickle-a-head entrance fees. Practical application of the work is given, but knowledge is often found lacking.

Francis Walker, '92, who is taking a post-graduate course in Political Science at Columbia, spent his recent vacation in Boston, and improved some of his leisure moments by visiting his old haunts in the top of Rogers.

The competitive drawings of the "Rotch Traveling Scholarship," which were exhibited in the Art Museum, have been brought over to the museum of the Architectural Building, where they will be on exhibition.

The *Boston Herald* says: "Mr. Robeson, '94, has accepted the position of assistant engineer to the Kimberley diamond mine in South Africa, and will assume the duties of his position some time in February."

The exam. in Heat was a square one. Many a Junior thanks his lucky stars for that. Thermo also was easier than most had dared to hope for. But was not that one paragraph in Scientific German a "corker?"

Once more we say, "Subscribe early this term to the weekly TECH." For \$1.25 the subscriber secures the fifteen numbers to be issued this term, including the double number and the excellent reproduction of the football team.

We hope the Institute Committee will consider the "Dance Question" among other things. Social affairs of this nature at Tech. are sadly in need of "renovating," and this committee should be the one to handle the matter.

The Junior Chemical Engineers are in hopes of finding the second term easier than the first. It certainly couldn't be much harder and keep many men in it. At the semies they had ten examinations in nine days. No "hustling" was required.

Professor (explaining the telephone): "This instrument, gentlemen, is a model of the early invention made in Germany. The original form consisted, I understand, of a beer barrel spigot for the transmitter, and a sausage membrane for the diaphragm."

Ninety-four is doubtless looking ahead to its approaching Class Supper. It is to be hoped that a large and enthusiastic delegation will turn out, for the time is well chosen, and everybody ought to be happy, with semies in the rear. The Junior is generally credited with being most prone to all sorts of social pleasures. Let us see.

A. D. Fuller, '95, is ill at his home in Wakefield with scarletina, and quarantined, as he writes, from all the world. Mr. Fuller's bright pen is much missed from our local department,—an additional reason why we, in common with his numerous friends, wish him a speedy release from confinement, and recovery to good health.

The Institute was not wholly deserted by its students last week. Every morning a few whom Boston still retained gathered in Rogers corridor for mail, and scanned with interest and anxiety the faces of the several Powers as they passed on their way to the office with reports. A good mind reader would have found steady employment.

Perhaps next year THE TECH will try the plan adopted at Wellesley. At the beginning of the first term every young lady is said to receive a note to this effect: "Unless you send

notice to the contrary to Miss—— before Sept. ——, you will be considered a subscriber to the ——Magazine.” This certainly secures the names of the lazy ones, but how about collecting subscriptions?

The time is coming for the Institute Committee to hold its meeting. Great things may be accomplished for the good of Technology through this committee, if only its decisions and recommendations are backed by the Institute at large. The majority of the men composing it are thoroughly representative Institute men, and may well be trusted to suggest and carry out plans for promoting our welfare. Let everyone co-operate with it.

Through the sad death of Bishop Phillips Brooks Technology has met with a well-nigh irreparable loss. Those who have heard any of his baccalaureate sermons to the Senior classes will thoroughly appreciate this fact. Many of the colleges in the vicinity have likewise great reason to regret the death of this noble, whole-souled man. Would that the world possessed more such as he.

Grinds and similar contributions may be handed in to the “Technique” Board as late as February 11th. After that date positively no further matter can be received. “Owing to a dearth of grinds,” the Board issued a circular to the Junior Class requesting a more liberal interest and aid than had at that time been vouchsafed. We trust it produced the desired effect. Everything counts, so everything will be welcomed.

“Technique” has been continuing the even tenor of its way “during the semiannual vacation.” Little rest or recreation have its editors obtained. This is a labor of love, for there’s no money in it. Every man in the Institute who is at all liable to be “broke” during the latter part of March should begin now to lay aside the wherewithal to purchase one or more of these articles. It is sure to be of more than ordinary interest, since the past year has been an unusually eventful one for Technology.

Why are there not better lighting facilities furnished for the General Library? We have electricity for the drawing rooms, and electricity for the engineering laboratories, but flickering, insufficient, high gas jets in the library. And, by the way, these same gas jets are turned out sharply at five o’clock. Why are the other lights “seen burning at 5.25?” Put out the lights in every place save the “gym” at five o’clock. Turn out the grinds as well and put them at work on the pulley machines.

January 3d the Civil Engineering students of Option I. visited Sewall’s Falls, N. H., where a timber and stone crib-work dam some 500 feet long is being built across the Merrimack river. The work of construction was at a very favorable stage for examination, and through the courtesy of Mr. George F. Page, President, and Mr. Ulrich, Engineer of the Water Power Company, every facility was extended to the party. A large power is being developed, a considerable portion of which is to be transmitted electrically several miles, to Concord.

The following from the *Lawrence American* of January 25th, will be of interest to many of our readers: “George W. Hamblett, a former Lawrence boy, a graduate of the high school, in the class of ’84, and now an instructor in the Massachusetts Institute of Technology, was married Tuesday afternoon to Miss Kate Clark, at the residence of the bride’s parents, 506 Lowell Street. The bride is a graduate of Bradford Academy, and the daughter of President Wm. P. Clark, of the Lawrence National Bank. The ceremony was performed at 3 o’clock by Rev. W. A. Keese, of Trinity Church, and standing under an arch of green, the young people began life’s journey together. Mr. and Mrs. Hamblett will reside in Boston.”

The following shows what an enviable reputation the Institute has among men most able to judge it. A boy who lived in the West determined to go to a scientific school. The next thing to decide was which one. He

collected a great number of catalogues, among them one of THE Institute. This only made matters worse, however, and it was about settled that he should go to Purdue University, principally because it was not far from home. He accordingly sought an interview with Dr. Smart, the president, during which he remarked that he had thought of going to the "Boston Technology." The president looked over his glasses and said:

"Young man, can you go there?"

"I think so," was the reply.

"Then go!"

The president picked up his hat and cane, and the interview was ended.

The trial tests on the 300,000 pound testing machine in the Mechanical Engineering Laboratory, took place on the 28th of last month. The compressive capacity of the machine was determined by the crushing of an oak column 10 by 12 inches in section, and 17 feet long. This piece broke under the compressive load of 297,000 pounds. The tensile test was on a steel bar, 2 inches in diameter. This specimen proved too strong for the apparatus; but after a short groove was cut in one side of the bar, it was fractured under a stress of 296,000 pounds. To show the delicacy of the machine and weighing apparatus, a small wire was pulled apart by 140 pounds tension. In none of the above experiments were measurements of any kind taken, the tests being merely to determine the actual capacity of the machine, before finally accepting it from the builders. Needless to say the results were very gratifying to Professor Lanza.

The annual meeting of the Board of Editors took place on Monday, January 8th, in THE TECH office, the chief editor presiding. After the usual weekly routine business the election of officers for the ensuing year was proceeded to. The chief editor nominated as his successor Mr. R. B. Price, '94, and after some discussion, very complimentary to the nominee, the nomination was unanimously ratified.

On motion by Mr. Lord, Mr. A. D. Fuller, '95, was unanimously elected Secretary, to succeed Mr. Speer. A general discussion of the policy of the paper, of finances, and of the outlook and hopes for the future then took place, and the interest and enthusiasm manifested were conclusive evidence that the weekly TECH is already on a sound basis. On motion by Mr. Howland a vote of thanks was unanimously tendered to Mr. Rice, the retiring Editor-in-Chief, for his conscientious work in behalf of this paper; and then, with many congratulations to his successor, the meeting adjourned.

It was announced in our last issue that in this number of THE TECH a full list of the subjects of Senior theses would be given. It has been found, however, that in the majority of the departments very little progress has as yet been made in this regard, which, coupled with the difficulty of reaching the men individually during the examination season, has left the statistics gathered up to date in a state of very unsatisfactory incompleteness. We are enabled, however, to present in full the list for Courses II. and X., and additional subjects will be given from week to week as they shall be secured.

SUBJECTS OF THESES.

COURSE II.—MECHANICAL ENGINEERING.

- H. W. ALDEN: Hydraulic Pump and Press.
- M. T. BARBOUR (with F. D. RICHARDSON).
- F. BAKER (with J. H. GARDNER): Test of Triple Expansion Engine on Steamer Plymouth.
- E. E. BLAKE (with M. GORHAM): Efficiency of Water Meters.
- S. W. BRAMAN: Riveted Joints.
- E. B. CARNEY: Locomotive Tests.
- N. R. CRAIGHILL: Cements.
- W. W. CROSBY (with H. W. DAWES): Test on Worthington Duplex Steam Pump.
- H. W. DAWES (with W. W. CROSBY).
- J. H. GARDNER (with F. BAKER).
- M. GORHAM (with E. E. BLAKE).
- E. M. HAGAR: Limiting Pitch for Riveted Joints.
- E. KENNISON: Investigation of Old Theory of Belting.
- F. H. KEYES (with J. W. LOGAN): Smokestacks for Locomotives.
- H. M. LATHAM: Tests on Pistons.
- J. W. LOGAN (with F. H. KEYES).

- B. M. MITCHELL (with C. E. PAINE): Compound Locomotives.
 C. R. NUTTER (with F. A. WALLACE): Coefficient of Friction of Oils.
 C. E. PAINE (with B. M. MITCHELL).
 J. Y. PARCE: The Transmission of Power by Ropes.
 H. M. PHILLIPS (with J. Y. PARCE).
 F. D. RICHARDSON: Viscosity, etc., of Cylinder Oils.
 H. A. RICHMOND (with J. R. SPEER): Effect of Blow Holes in Steel Plates.
 J. R. SPEER (with H. A. RICHMOND).
 J. T. TOMFHORDE: Design for a Boiler Shop.
 F. A. WALLACE (with C. R. NUTTER).
 H. T. WOODS: Test on triple expansion Engine.
 W. L. TIDD: Water Wheels.
 C. M. TAYLOR: Theory of Stability of Ships.

COURSE X.—CHEMICAL ENGINEERING.

[The course in Chemical Engineering is essentially one in mechanical engineering; embracing, however, in addition to the principles of this latter science, the application of chemistry in industrial arts.]

- W. W. CARTER (with C. N. COOK): Electrical Deposition of Copper and Nickel.
 H. L. CLAPP: Efficiency of Roney Stokers as Applied to Boilers.
 C. N. COOK (with W. W. CARTER).
 T. T. DORMAN (with A. E. FOWLE): Refrigerating Machinery.
 A. E. FOWLE (with T. T. DORMAN).
 J. F. HINCKLEY: Tensile Strength of Cotton Cloth before and after Dyeing with Aniline Black.
 F. N. MERRILL (with H. L. RICE): The Loss of Heat in Steam Boilers.
 H. L. RICE (with F. H. MERRILL).

The Birth of a Cynic.

THE young man settled back luxuriously into the big lounging chair, and watched her contentedly as she busied herself prettily with the knicknacks on the tea table. It was a pleasing picture, a restful picture, he told himself; the dainty tea table with its load of delicate china and gleaming silver, the purring kettle of burnished copper, reflecting the light from the fireplace into the gathering twilight, and the girl beyond, tall, and fair, and sweet, unconscious in her artless grace. She looked up at him as she handed him his tea, and smiled knowingly at the satisfied look on his face. "You understand, don't you," he said as he took the fragile cup, and held it gingerly. "I can't help comparing them, you know; this tasteful room on the one hand and mine, the conventional college affair, on

the other; the everlasting chatter of school and theater, the everlasting grind, with these quiet afternoons; and the fellows—but there, I've said enough, I guess. You don't wonder that I come often, do you, and watch the movements of that clock with so much regret?"

"I'm glad you put that last in," she said, as she laughed at him over the table, "or I might not have known just which you preferred, you know."

The young man did not answer her, but sat sipping his tea, and thinking, and the girl watched his grave face curiously, but without surprise. There was perfect understanding between these two, the sort of acquiescence that comes from long friendship, and yet it was less than a year since they had first met, and he had asked permission to call. How well she remembered now the first few weeks when he came to see her, and she knew him merely as one of many college men, who in their way made an enjoyable factor in her gay society existence. And how clearly was impressed on her memory that evening when her cousin had been with her, and he had come to call, bringing with him a college friend. She remembered how just before they had gone he had been talking to the other girl, and she had seen his face lighten as it was wont to do when he was sure of himself and confident of his subject, and how she had raised her hand to his friend, and they had listened. "You say his stories are after all unsatisfactory, and wonder why I like them so much," he was saying. "Well, I will tell you just why I like Richard Harding Davis as a writer. It is because he hits my case so nearly. He seems to know just how a young man feels when he is practically cut out from that which is the best thing in life, the society of good women; and he seems to realize the lack of interest that greets all effort except the most brilliantly successful. You know what he says about those young miners in Creede, and the photographs, and all that, and you remember perhaps the words he makes Gordon say of his friend and

the girl who fell in love with him on the steamer. 'He had fascinated her in the close steamer intimacy by which she came to know of his life and ambition. She had never met such a man before; said Gordon; and that might well have been true, but the implication is there I think for those who can appreciate it, that she had probably met many who were more nearly of his sort than she guessed, but had never, in her butterfly existence, penetrated with them beyond the surface.' They were all listening eagerly as he had continued, 'You see how much this means to me, how much I can appreciate it. I have to study hard and late in my college work, and even if there was more time to give to society, there are few doors in this cold city that would be open to me. And take this call to-night for example. You have been very kind to me, and I think I have come to know you a little. I shall not forget you, for you are one of few. But with you, you see, it is different. I am but one man in hundreds, the acquaintance of an evening—no, do not answer yet.' He was speaking rapidly, unconscious that the rest were listening. 'In an hour,' he went on, 'Jack and I will be hard at work studying again, while you—well you,' he added rather drearily, 'will be discussing us unless you will have already forgotten us.'

He had come again to call after her friend had gone, but it was no longer the same. She knew him now for the courageous, manly, ambitious student that he was, and she knew herself, and what was needed. And he must have felt the change, for their acquaintance had quickly ripened into friendship, and then into a comradeship that was delightful to both. They were brother and sister to each other, and perhaps, who can tell, much more.

The girl was thinking of all this and watching the grave face before her, when the young man rose and, setting down his tea cup on the table, stood for a moment irresolutely before the fire. 'Annie,' he said slowly, as he turned and faced her, 'Annie, I think I would

like to ask you a question. It is rather a hard one to state," he went on without waiting for her to answer, "but I think I would like to know what you think about it." He picked up a teaspoon from the table and put it down again nervously, while the girl waited in silent curiosity.

"Imagine, if you will," he said, finally, "a young college man, rich, and with good breeding, the son of a family prominent in the society of his native city, and accepted here in much that is the best. He came to college and became my friend, not an intimate friend, but one of whom I knew much of the everyday history. He was like other college men with too much money; and the company with which he associated was too often, most often, if you like, not the best and nearly the worst, the women,—but you understand, I think, what I mean. He was no better nor worse than hundreds of other men accepted in society to-day without question; no better nor worse than almost all his college mates. Among his friends he numbered a host of refined girls who liked him well; on the others I will not dwell. Imagine, then, such a man, my friend or acquaintance; and suppose a girl, one whom I knew to be all that is good and pure,—you yourself, perhaps,—asked me about him, asked me whether he were a nice fellow; and that on my answer depended her meeting him and liking him. How would you, knowing all the circumstances as only a man, of course, can, however, know them, have me answer the girl? Shall I reason that he cannot hurt the girl and she can do him good, and let the truth go? Shall I say he is not 'nice,' without giving reasons? Or, shall I make the lie the truth, accepting society as it is? Tell me what, from the girl's point of view, I ought to do, for I own I do not know. Tell me."

He stopped and watched the girl's face anxiously, waiting for her to reply. There was a moment of silence in which the clock chimed out merrily the hour, and then she said,

- B. M. MITCHELL (with C. E. PAINE): Compound Locomotives.
 C. R. NUTTER (with F. A. WALLACE): Coefficient of Friction of Oils.
 C. E. PAINE (with B. M. MITCHELL).
 J. Y. PARCE: The Transmission of Power by Ropes.
 H. M. PHILLIPS (with J. Y. PARCE).
 F. D. RICHARDSON: Viscosity, etc., of Cylinder Oils.
 H. A. RICHMOND (with J. R. SPEER): Effect of Blow Holes in Steel Plates.
 J. R. SPEER (with H. A. RICHMOND).
 J. T. TOMFHORDE: Design for a Boiler Shop.
 F. A. WALLACE (with C. R. NUTTER).
 H. T. WOODS: Test on triple expansion Engine.
 W. L. TIDD: Water Wheels.
 C. M. TAYLOR: Theory of Stability of Ships.

COURSE X.—CHEMICAL ENGINEERING.

[The course in Chemical Engineering is essentially one in mechanical engineering; embracing, however, in addition to the principles of this latter science, the application of chemistry in industrial arts.]

- W. W. CARTER (with C. N. COOK): Electrical Deposition of Copper and Nickel.
 H. L. CLAPP: Efficiency of Roney Stokers as Applied to Boilers.
 C. N. COOK (with W. W. CARTER).
 T. T. DORMAN (with A. E. FOWLE): Refrigerating Machinery.
 A. E. FOWLE (with T. T. DORMAN).
 J. F. HINCKLEY: Tensile Strength of Cotton Cloth before and after Dyeing with Aniline Black.
 F. N. MERRILL (with H. L. RICE): The Loss of Heat in Steam Boilers.
 H. L. RICE (with F. H. MERRILL).

The Birth of a Cynic.

THE young man settled back luxuriously into the big lounging chair, and watched her contentedly as she busied herself prettily with the knicknacks on the tea table. It was a pleasing picture, a restful picture, he told himself; the dainty tea table with its load of delicate china and gleaming silver, the purring kettle of burnished copper, reflecting the light from the fireplace into the gathering twilight, and the girl beyond, tall, and fair, and sweet, unconscious in her artless grace. She looked up at him as she handed him his tea, and smiled knowingly at the satisfied look on his face. "You understand, don't you," he said as he took the fragile cup, and held it gingerly. "I can't help comparing them, you know; this tasteful room on the one hand and mine, the conventional college affair, on

the other; the everlasting chatter of school and theater, the everlasting grind, with these quiet afternoons; and the fellows—but there, I've said enough, I guess. You don't wonder that I come often, do you, and watch the movements of that clock with so much regret?"

"I'm glad you put that last in," she said, as she laughed at him over the table, "or I might not have known just which you preferred, you know."

The young man did not answer her, but sat sipping his tea, and thinking, and the girl watched his grave face curiously, but without surprise. There was perfect understanding between these two, the sort of acquiescence that comes from long friendship, and yet it was less than a year since they had first met, and he had asked permission to call. How well she remembered now the first few weeks when he came to see her, and she knew him merely as one of many college men, who in their way made an enjoyable factor in her gay society existence. And how clearly was impressed on her memory that evening when her cousin had been with her, and he had come to call, bringing with him a college friend. She remembered how just before they had gone he had been talking to the other girl, and she had seen his face lighten as it was wont to do when he was sure of himself and confident of his subject, and how she had raised her hand to his friend, and they had listened. "You say his stories are after all unsatisfactory, and wonder why I like them so much," he was saying. "Well, I will tell you just why I like Richard Harding Davis as a writer. It is because he hits my case so nearly. He seems to know just how a young man feels when he is practically cut out from that which is the best thing in life, the society of good women; and he seems to realize the lack of interest that greets all effort except the most brilliantly successful. You know what he says about those young miners in Creede, and the photographs, and all that, and you remember perhaps the words he makes Gordon say of his friend and

the girl who fell in love with him on the steamer. 'He had fascinated her in the close steamer intimacy by which she came to know of his life and ambition. She had never met such a man before; said Gordon; and that might well have been true, but the implication is there I think for those who can appreciate it, that she had probably met many who were more nearly of his sort than she guessed, but had never, in her butterfly existence, penetrated with them beyond the surface.' They were all listening eagerly as he had continued, 'You see how much this means to me, how much I can appreciate it. I have to study hard and late in my college work, and even if there was more time to give to society, there are few doors in this cold city that would be open to me. And take this call to-night for example. You have been very kind to me, and I think I have come to know you a little. I shall not forget you, for you are one of few. But with you, you see, it is different. I am but one man in hundreds, the acquaintance of an evening—no, do not answer yet.' He was speaking rapidly, unconscious that the rest were listening. 'In an hour,' he went on, 'Jack and I will be hard at work studying again, while you—well you,' he added rather drearily, 'will be discussing us unless you will have already forgotten us.'

He had come again to call after her friend had gone, but it was no longer the same. She knew him now for the courageous, manly, ambitious student that he was, and she knew herself, and what was needed. And he must have felt the change, for their acquaintance had quickly ripened into friendship, and then into a comradeship that was delightful to both. They were brother and sister to each other, and perhaps, who can tell, much more.

The girl was thinking of all this and watching the grave face before her, when the young man rose and, setting down his tea cup on the table, stood for a moment irresolutely before the fire. 'Annie,' he said slowly, as he turned and faced her, 'Annie, I think I would

like to ask you a question. It is rather a hard one to state," he went on without waiting for her to answer, "but I think I would like to know what you think about it." He picked up a teaspoon from the table and put it down again nervously, while the girl waited in silent curiosity.

"Imagine, if you will," he said, finally, "a young college man, rich, and with good breeding, the son of a family prominent in the society of his native city, and accepted here in much that is the best. He came to college and became my friend, not an intimate friend, but one of whom I knew much of the everyday history. He was like other college men with too much money; and the company with which he associated was too often, most often, if you like, not the best and nearly the worst, the women,—but you understand, I think, what I mean. He was no better nor worse than hundreds of other men accepted in society to-day without question; no better nor worse than almost all his college mates. Among his friends he numbered a host of refined girls who liked him well; on the others I will not dwell. Imagine, then, such a man, my friend or acquaintance; and suppose a girl, one whom I knew to be all that is good and pure,—you yourself, perhaps,—asked me about him, asked me whether he were a nice fellow; and that on my answer depended her meeting him and liking him. How would you, knowing all the circumstances as only a man, of course, can, however, know them, have me answer the girl? Shall I reason that he cannot hurt the girl and she can do him good, and let the truth go? Shall I say he is not 'nice,' without giving reasons? Or, shall I make the lie the truth, accepting society as it is? Tell me what, from the girl's point of view, I ought to do, for I own I do not know. Tell me."

He stopped and watched the girl's face anxiously, waiting for her to reply. There was a moment of silence in which the clock chimed out merrily the hour, and then she said,

slowly,—“ I think I understand you, but I do not believe I can answer you now, after all. And it seems to me,” she went on, more lightly, and with the faintest trace of flippancy in her tone, “ that you, the wise student, ought not to expect me, the mere society girl, to answer the question that you own you cannot solve. I really don't think it quite fair, you see. But sit down and have some more tea, and tell me more about it, and what you really think yourself.”

The young man looked at her rather sadly as he shook his head. “ Perhaps you thought it all very hypothetical,” he said, “ and yet only yesterday, I had to decide that question twice within three hours. I know how I did settle it, but whether it was right or not, that is the question. I do not know as I blame you for evading it, only,” he added, as he buttoned his coat to go, “ only,” and the smile was almost dreary, “ I fear you have answered it after all.”

H. L. RICE.



FIXTURES.

- Feb. 11. B. A. A.—Annual Open Handicap Games, in Mechanics' Building.
 March 3. Annual Interscholastic Scratch Games.
 March 11. M. I. T. A. C.—Fourteenth Annual Scratch Games, Winslow's Rink.

The M. I. T. A. C. will, in all probability, hold the New England Indoor Championship on March 11th, instead of its annual open scratch games. The meeting will be given in conjunction with the First Regiment Athletic Association in the large armory on Irvington Street. This is undoubtedly the finest place in New England to hold indoor games, if not the finest in the country. The track is nine

laps to the mile, and there are seating accommodation for several thousand people.

The M. I. T. A. C. Executive Committee held a meeting December 29th, in order to decide about joining with the First Regiment in this matter. Some doubt was expressed as to the advisability of a college athletic association holding games jointly with any outside club; but on discussion it was thought that owing to the high standing of the First Regiment A. A., Technology would lose nothing in being associated with them.

It seems unfortunate not to hold the annual scratch meeting, which has been such an athletic feature for the last dozen years, but if Technology unites with the First Regiment, it will merely bring its reputation for holding first-class athletic meetings with it into the new undertaking, and thus after all, there will be a gain rather than a loss. For to hold the New England Championship is a great honor, and will be sure to bring the Institute into very desirable prominence. As yet few details have been arranged, but the meeting is sure to be successful. This will be the first time any games have ever been held as the New England Indoor Championship.

A result of the cut down in salaries is seen in the declaration of Harry Taylor of the Louisvilles that he is through with professional baseball. He is studying law at Cornell University and will play with the ball club of that institution.

Williams College will have two excellent pitchers in Howe of last year's Harvards, and Hollister, who made such an excellent record last season. These men ought to do still better under the able coaching of W. H. Terry of the Pittsburgs.

Great pressure has been brought at Williams College to induce Captain Howard of last year's nine to resume his place at second base, but thus far without avail. He covers a great deal of ground, and there is no one in college who can compare with him in the position.

Luther Cary, the renowned sprinter of the Princeton and Manhattan Athletic clubs, has decided to again appear on the cinder path. He has entered for the World's Fair games, and good races can be expected between him and Bradley, the English champion, who is coming over for these games.

Tim Keefe of the Phillies has begun his work with the Harvard players. He thinks that Andy Highlands will make a fine pitcher. He has plenty of speed and curve. He says there is no reason why the Harvards should not beat the best college clubs, for the club will be stronger than it was last season, when it was undoubtedly the strongest college aggregation in the country.

Representatives of Johns Hopkins, Sewanee, Virginia, North Carolina, Tennessee, and Alabama universities, and St. John's (Annapolis, Md.) and Wake Forest (Wake Forest, N. C.) colleges met in Richmond, Va., December 28th, and inaugurated the Southern Intercollegiate Athletic Association. This will do a great deal to stimulate the athletic spirit of the South, which although it has not been lacking individually has needed organization.

The action of the football convention held in New York a short time ago, in enacting legislation that will confine the composition of Yale, Princeton, Pennsylvania and Wesleyan elevens to members of the college department, virtually decides the fate of the third named college in this branch of athletics. It is supposed that Pennsylvania will be compelled to withdraw from the association, as its academic department is insignificant in point of numbers as compared with its law, medical, dental, and veterinary schools, which rank among the first in this country. Sixteen hundred of its two thousand men are in these departments, and over fifteen hundred have never attended college elsewhere. The exclusion of these men from participating in intercollegiate football games seems unjust in the extreme.

In regard to the limiting of members of col-

lege football teams to undergraduates, the *New York Times* prints a lengthy editorial, clippings from which are the following:—

“The project to confine the colleges of the Intercollegiate Football Association to the selection of undergraduates as members of their teams is one that should be carried out. Where and when the present system of employing available men from any of the departments of a university originated it is difficult to tell. It is quite certain that fifteen years ago none of the leading colleges would have thought of drawing upon their law, medical, or theological departments for university players. At that time, however, the rivalry in college athletics had not received the stimulus of keen public interest. Yale has for some time been opposed to the practice, and in the past season played a strictly undergraduate team, except Graves, who was used only in emergencies. Princeton, whose post-graduate departments are rapidly growing, stands ready to second Yale in this matter. Harvard is, of course, less ready; while the University of Pennsylvania sees the prospect of complete demoralization on the football field if she is not permitted to draw on her law and medical departments.

“The most potent objection to the employment of men from the post-graduate departments is that it is destructive of the true college spirit. The public interest in university athletics has been developed by the knowledge that the rivalry between colleges was a sincere and manly desire to win, and thereby to do honor to a beloved *Alma Mater*. To undergo the sacrifice and severity of months of training, and then to go upon the field and chance all hurt for the glory of the crimson or the blue is just as commendable in its way as to suffer and take risks in a bigger cause. The men who will do the one will do the other; and though we may not think much about it when we are watching a game, the admiration we have for the players comes largely from a secret realization of this fact.

"The solution offered for the problem is to limit the post-graduate members of each team to those who took bachelors' degrees in the university. But, unfortunately, this leads to another evil—a species of professionalism. Men are induced to return to college to take post-graduate courses, in order that they may be retained on the football team, the baseball nine, or in the boat. These men do not give up the two or three years taken from their professions or business callings for nothing. Some "inducement" must be held out, and, whatever it is, it is in the nature of a payment for the service rendered. This, too, is destructive of the true college spirit, and it introduces into university athletics a factor which is destructive of all true manliness in sport."

The Bracket.

[A pastel in prose with apologies to a well-known writer.]

HERE is the Sophomore's bracket. There were shouts in the shop, the bell was sounded, and the shop was filled with Hear! Hear! The Sophomore rushed along through the alley to the shop. His breath panted, and his eyes gleamed with haste, for he was late. He wore red whiskers, and the high wind fluttered round him as he went.

The men shouted; the roll was called. The Sophomore rushed along through the alley to the shop.

The Sophomore took up his bracket, his tools, dull like hoes, fumbled with its moulding shape; his overalls were as fine as a bank check.

The Sophomore's time of loaf was past; he went to the shop with only piece work in his mind, and he worked on his bracket.

The men shouted; the shop was full of twilight which reddened the flame of the lonely gas jets.

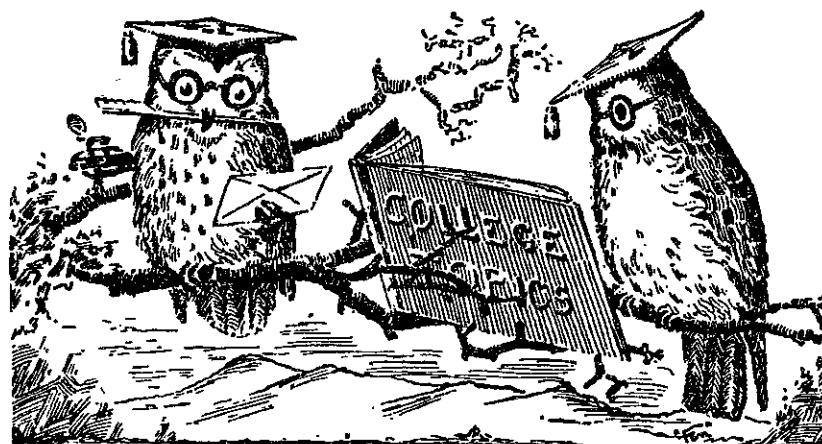
The Sophomore's bracket was of fine pine, and his name was on its side. Merrick had given it to him, and he was working of it up,

for Merrick gave it to him in a time when it was not, and soon it ought to be.

The Sophomore was weary, and his time of loaf was past. He cut chips from the bracket as he worked at the shop, with his mouth talking like the captain of a three-master in a gale.

The men shouted; but their shouts have long since died away. The shop was full of twilight,—but the twilight has gone and darkness taken its place. Long ago the Sophomore went no more to the shop; his brain ceased throbbing, and his face went out of sight beyond the chapel door. Long ago he and his double flunks were forgotten, and the water in the buckets turned black with age. But here is his bracket.

H. L. R.



The Chicago University is to have a \$200,000 gymnasium.

The members of Greek fraternities in the colleges number 77,000.

Cornell is to have an eight-oared shell of aluminum made in Philadelphia.

Of the 322 members of the House of Representatives, 106 are college graduates.

William Astor has promised \$1,000,000 to found a negro university in Oklahoma.

E. E. Jones has been elected captain of next year's football team at Dartmouth.

University extension work is still growing. During the fall fourteen centers were established.

The directors of the World's Fair have allotted 150,000 square feet for the educational exhibit.

The Massachusetts Institute of Technology has opened a co-operative store.—*Oberlin Review*.

Harvard has made application for 7,000 square feet for its intended exhibit at the World's Fair.

The Harvard *Crimson* is twenty-one years old; the *Princetonian*, sixteen; the *Yale News*, fifteen.

The last three justices of the Supreme Court appointed by President Harrison have been Yale men.

There is some talk of a boat race between Yale and Harvard, to take place at Chicago during the exposition.

It is reported that President Harrison will, after March 4, lecture on law at the Leland Stanford University.

An express company, composed of and managed by the students, has been formed at the University of Chicago.

On January 6th, the Signa Phi Fraternity House, Williams, was destroyed by fire, occasioning a loss of some \$50,000.

The University of Pennsylvania is to have a new dormitory costing \$125,000. It is to be the largest in the United States.

The University of Michigan offers a six years' course, which, when completed, gives degrees in both science and medicine.

The Wellesley Shakespeare Society intends to build a clubhouse on the model of Shakespeare's house at Stratford-on-Avon.

The University of Michigan last year graduated 689 men, the largest number ever graduated from an American institution.

In the last six years, 389 students of Prussian schools have committed suicide on account of failure to pass examinations.

The largest dormitory in the United States is soon to be erected at the University of Pennsylvania, at the cost of \$125,000.

She: "How did you get on at college?"

He: "Didn't get on at all. It was the Faculty that 'got on', and I got out."

The Leland Stanford University, at Palo Alto, has a campus containing about 70,000 acres, with a driveway seventeen miles long.

Dartmouth has obtained the use of the New Hampshire building at the World's Fair for a specified day, when a college reunion will be held.

A Japanese student describes Harvard in a letter home, thus: "A very large building where the boys play football, and on wet days read books."

One man in 5,000 in England takes a college course; one in 615 in Scotland; one in 213 in Germany; one in 2,000 in the United States.

The first aluminum racing shell ever built is owned by Commodore Statzell of Schuylkill Navy. It weighs a trifle over 26 pounds, is 31½ feet long and 12½ inches beam.

The Princeton Faculty have passed a law forbidding a student from representing both an outside organization and the college in any line of athletics during the same year.

University of Pennsylvania now claims the honor of having the oldest living graduate of an American college, in the person of Dr. Kitchen, of Philadelphia, of the class of 1819.

There are said to be over three million books in the college libraries of this country. Yale, Harvard, Columbia, Cornell, and the University of Michigan have over one hundred thousand each.

Dr. McCosh, of Princeton, has been unanimously elected to the chairmanship of the department of rational Psychology of the International Congress of Education, to be held in Chicago next July.

Exeter is to have a new dormitory. It is to be a brick structure, and is to accommodate fifty students. In honor of Gideon L. Soule, the academy's third principal, the dormitory is to be named Soule Hall.

The University of Chicago intends to reserve a space at the World's Fair which it will occupy as a general reception room for all students, professors, and graduates, thus performing the duties of host at the Fair.

The new telescope for the Chicago University will not be ready for use till the fall of 1895. The lens will be cast by Alvin G. Clark, and will be forty-five inches in diameter; or eleven inches larger than that in the great Lick telescope.

If the winner in the Yale-Harvard boat race next summer refuses to row Cornell, Cornell will claim the championship of America, and endeavor to arrange an international match with the winner of the Oxford-Cambridge race.—*Cornell Daily Sun*.

The question of a college paper is being agitated at Smith. The need of one has long been felt. It has been voted by the Sophomore class, which was the first to bring the matter before the members, that the paper be monthly, and contain about fifty small pages of matter.

President Eliot of Harvard has informed the head of the Harvard Annex Society for the College Education of Women, that if the Annex could bring to Harvard \$250,000, in addition to its plant, he would use his influence to have the Annex accepted as part of the university.

American colleges have been represented in the office of President of the United States, as follows: William and Mary, 3; Harvard, 2; Princeton, Bowdoin, Williams, Union, Dixon, Hampden, Sydney, Kenyon, University of North Carolina, West Point, and Miami, one each.

The catalogue of Yale University for 1892-93, the one hundred and ninety-third issue, has appeared, and testifies to marked growth in all branches. This year's freshman class numbers 507, against 468 a year ago. The number of instructors has been increased from 156 to 185 during the past year.

Certain changes in the method of scoring in football are being discussed. It is proposed to abolish the place kick altogether. The *Philadelphia Press* suggests the following: Safety, 1 point; goal from field, 3 points; touchdown, 5 points; and goal from touchdown (if not abolished), half a point.

Football captains for next year have been elected as follows: Yale, Hinkey, '95; Harvard, Waters, '94; Princeton, Trenchard, '94; Williams, Haskell, '94; Exeter, Conner, '94; Andover, Rodgers, '94. The election of Hinkey of Yale marks the first time that a senior has not been captain of the eleven of that university.

The recent action of the Yale Faculty, in regard to the disturbance created by the Freshman class in New Haven some time ago, will not, as generally supposed, hinder freshmen from playing in the 'varsity baseball team this spring. The aim of the Faculty's decision was to prohibit any Yale-Harvard Freshman baseball game this year.

The University of Chicago will publish, from its own press, three periodicals on University Extension, Economics, and Geology. The quarterly journal of Economics will be under the efficient management of Professor Laughlin. Professor Laughlin was instructor in Political Economy in Harvard from 1878 to 1883; for the last two years he has been at Cornell.

"The phenomenal growth of Cornell University and the University of Michigan has not yet ceased, and there is no prospect that it will in the immediate future. The former institution is said to have nearly or quite 1,600 students, and is but thirty years old. The latter is probably now the largest University in America, and is conducted on the broadest possible principles."—*The University Magazine*. [How about M. I. T.?—ED.]

The second issue of the *Harvard Graduates' Magazine* maintains the high standard which was set by the first. Aside from the

liberal supply of news relative to college events and the movements of the alumni, there are timely articles on "Education in the Preparatory Schools," by Charles Francis Adams and Prof. W. W. Goodwin; "Harvard and Yale in the West," by Rev. C. F. Thwing; "The New Psychology," by Prof. H. Munsterberg; and Mr. Justin Winsor's Columbus address on "America Prefigured." The periodical cannot but prove an important factor in keeping alive the interest of the alumni in the college.

The Intercollegiate Football Association met in New York on the night of January 21st, and adopted the following rule: "No member of the graduate department or special student shall be eligible, nor any undergraduate who is registered or has attended lectures or recitations at any other university or college, nor any undergraduate who is not pursuing a course for a degree requiring attendance for at least three years." The University of Pennsylvania fought the rule very energetically, but they were outnumbered three to one. Harvard sent no delegate, and consequently its position is not officially known. It is supposed that this rule will remove all traces of professionalism from college athletics.

In the last number of the *North American Review* appears a not unreasonable onslaught upon certain of the larger colleges for permitting their glee and mandolin clubs to travel about the country giving entertainments. The writer in question holds that to all practical purposes it is as if the students became professional showmen. The receipts from the concerts may be turned over to some college object, but the unhealthful excitement and the unnatural craving for applause and attention which a life of the kind is sure to arouse follow, and the influence cannot but be injurious to the student. Very largely it is a matter, however, which parents will have to regulate rather than the college officials. The trips are in vacation time.

Afternoon Tea.

SCENE—A BACK BAY PARLOR.

NELL (pouring). JACK.

Nell.

I'm sure you must have hurried, Jack;
How did you get here—take a hack?
You said you'd come at five, you know,
Or somewhere near an hour ago.

Jack.

Since when I've watched (and much enjoyed)
Ned Ashley, whom you term "devoid,"
And some one who's not far away,
Acting a most delightful play.

Nell.

I like your fine dramatic taste,
He said "Good afternoon," in haste;
Perhaps 'twould be as well if you
Could be as expeditious, too.

Jack.

Thanks for the hint.

Nell.

Before you go
There's one thing still I'd like to know:
Who went to skate last Friday night
With—well, you called her once "a fright"?

Jack.

Who danced for half the night or more,
With some one who's "a perfect bore"?

Nell.

Who lost his temper if I did,
And to the coat room went and hid?

Jack.

Who wouldn't speak or give a glance
To him who took her from the dance?

Nell.

Who walked away as proud and stiff—

Jack (interrupting).

Who looked back after him as if—

Nell (laughing).

As if she didn't care a cent
Whether Sir Silly came or went.

Jack.

Go on; you always talk a week.

Nell (after a pause, softly).

Who would confess a little pique?

Jack.

Who would avow a trace of spite?

Nell.

Who was a *trifle* impolite?

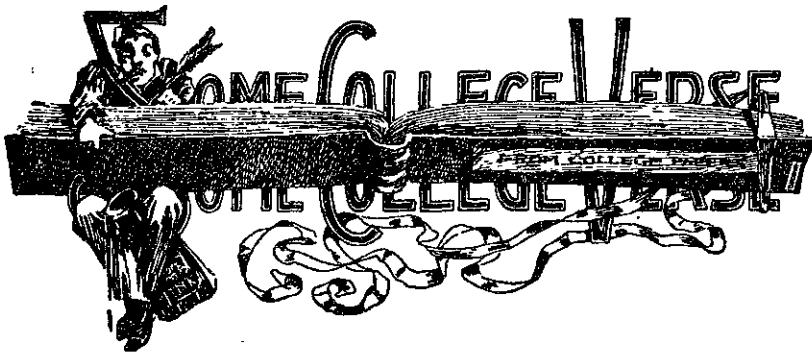
Jack.

Come, let's let bygones bygones be.

Nell (handing him a cup).

And drink forgiveness in this tea.

H. A. RICHMOND.



A WARNING.

A dog; a dūde;
A maiden wooed;
A father unconsenting;
A fall of pride;
A loss of hide;
And Towser unrelenting.

—Trinity Tablet.

TO-MORROW.

To-morrow—or, to-morrow—or, to-morrow—
The past is dark, the present darkening, too,
Only the future is of roseate hue,
Without its shade of pain or fear or sorrow;
The day is done—why should we trouble borrow?
The sun will rise through heavens divinely blue,
And then, ah, then, the world will yet prove true—
To-morrow—or, to-morrow—or, to-morrow.

Thus doth man live, seeing with each new day
A hope o'erthrown, and yet he liveth on!
Bent with his load, he struggles on his way,
Believing sorrow dieth with the setting sun.
Ah, did he know, there is an end of sorrow,
But in the land where there is no to-morrow.

—Nassau Lit.

A KNOX HAT.

I bought my tile for a genuine Knox
And paid a genuine V,
And after the rush on St. Patrick's Day,
Its knocks you could plainly see.

—Trinity Tablet.

A NEW YEAR'S POE-M.

Here's the postman with the bills—
New Year's bills.
With a world of worriment my soul their coming fills,
All around they sprinkle, sprinkle,
A gloom like that of night,
While the postman's keys they tinkle,
And his eyes they fairly twinkle
With ironical delight,
As he comes, comes, comes,
Till the neighbors think us chums,
And to my great tribulation my letter box he fills,
With the bills, bills, bills, bills,
Bills, bills, bills,
While I'm moaning and I'm groaning at the bills.

—Columbia Spectator.

WAIT FOR THE LOST.

"Umbrellas re-covered while you wait,"
In the window read the sign;
From all my friends who have borrowed them,
O, pray, recover mine.

—Brunonian.

YE MODERN POET.

The modern poet tunes his lyre,
All in a minor key,
His songs—if one can call them so—
Are sad as they can be.
He sings about his lady fair
His genius—his life's star,
And tells us how she breaks his heart,
So cold, so still, so far.

So when I read this tearful stuff,
I bless the sisters three,
Because the sorry poet's lot,
Was not bequeathed to me.
No single star could fill the bill,
Or claim my adoration,
My heart is fully large enough
To love a constellation.

—Princeton Tiger.

They played at cards on the yellow sand,
When the fields and the trees were green;
She thought that the trump was in her hand,
He thought that he held the queen.
But winter has come, and they both have strayed
Away from the throbbing wave—
He finds 'twas only the deuce she played,
She finds that he played the knave.

—Spectator.

TRIOLET.

I fall on my knees
To fasten her skate.
Although my hands freeze
I fall on my knees,
Because she said "please."
Confound that heel plate!
I fall on my knees
To fasten her skate.

—Williams Weekly.

THREE MAIDENS.

Three maidens went shopping out in the West—
West Twenty-third—when the sun went down;
Each thought of the color that suited her best
For a new spring hat or a dancing gown,
And had it sent home on the morrow.
And each for the man she loved did buy
A wild and terrible patterned tie
That each man wore in sorrow.
For women buy and men must wear,
Though the style is enough to curl one's hair,
Or trouble dire to borrow.

—Ex.



OUR NEW SHIRTINGS

Are now ready. French Madras, English Oxfords, Scotch Cheviots and Wash Silks. For Men's Negligee and Outing Shirts; for Ladies' and Children's Waists and Blouses, or sold by the yard.

THE PRINCE'S GRAVAT FOR GENTLEMEN, NEW.

Also, English Long Scarfs, The London Puff, and New Ascots.

Gloves made to our special order. The New Gold Tan, the Famous London Tan at \$1.35, Fowne's New Cavendish Tan, Fowne's Red Tan.

Shirts for Business Wear, Outing, Negligee, Traveling, and Dress Occasions, most thoroughly made, and always in stock for immediate use.

Pajamas, or East India Sleeping Suits and Long Night Shirts, made from the best English Flannel, Cotton and Silk, for Steamer, Sleeping Car, Yachting or Hunting; Medium and Heavy Weights for Men and Children.

Ladies' and Men's English Silk Umbrellas, in choice and entirely new designs, in Gold, Silver, and Natural Wood Handles, are just opened, \$2.75 to \$35, at Noyes Bros'.

NOYES BROTHERS, Washington and Summer Streets.

**Blazers,
Sweaters,
Tennis Suits,**



And Clothing of all kinds,

CLEANSED OR DYED

and carefully pressed.

ALSO A

FINE FRENCH LAUNDRY DEPARTMENT.

LEWANDO'S

French Dyeing and Cleansing Establishment,

17 Temple Place, BOSTON.

365 5th Avenue, - - NEW YORK.

Bundles called for and delivered.

St. Botolph Hall.

NEW TECH. DORMITORY.

Favorably situated at the corner of St. Botolph and Harcourt Streets, near all the Departments of the Massachusetts Institute of Technology.

Furnished Suites

To let, including heat and baths.

Restaurant

In Building.

For terms apply on the premises.

GODFREY MORSE,
PROPRIETOR.

F. L. DUNNE,

TAILOR AND IMPORTER,

Transcript Building, 328 Washington St., cor. Milk St.,
BOSTON.

SHOES

To be entirely Satisfying should have EASE,
GOOD STYLE and DURABILITY.

This trio of Essentials are possessed
by the



FINE SHOES,

And we respectfully request Ladies and Gentlemen intending to purchase to allow us the privilege of trying on a pair; to see and feel this Shoe upon the foot, is to make a customer.

POPULAR PRICES

HATHAWAY, SOULE & HARRINGTON (Incorporated).
35 BOYLSTON STREET, Between Washington and Tremont Streets, BOSTON.
T. E. LOVEJOY, Manager.

You can save fully *25 per cent* by purchasing your Fall Suit and Fall Oversack from

LEOPOLD MORSE & CO.,
Cor. Washington and Brattle Streets.

We manufacture all our clothing, and have exclusive patterns in over one hundred styles especially adapted for young men.

AN INSPECTION OF OUR LARGE STOCK IS SOLICITED.

L. E. FLETCHER & CO.

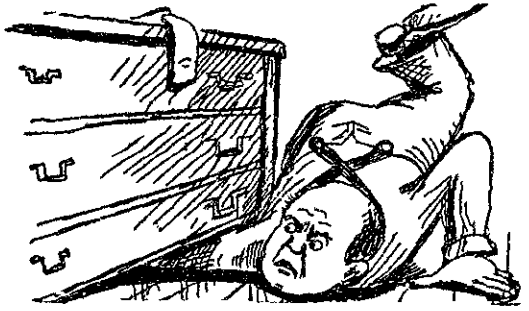
HATTERS AND MEN'S OUTFITTERS.

Hats in Leading and Correct Styles for Young Men.

. Novelties in Neckwear, Gloves, Hosiery, and Underwear.

CANES, UMBRELLAS, Etc.

158 BOYLSTON STREET (opp. Common), BOSTON.

"SWELL" STYLES.**A DRESSING CASE.**

New designs in Dress Studs or Buttons
 \$1.00 \$1.50 and \$2.00
 Scarf Pins, \$1.00 1.50 2.00
 Link Buttons, \$1.00 1.50 2.50

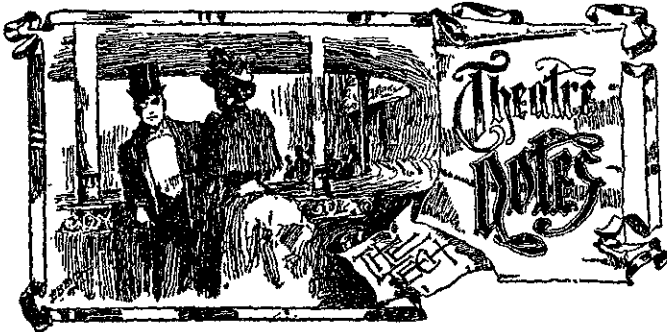
NICETIES FOR MEN'S WEAR.

Neck Dress (choice effects) . 50c. to \$2.00
 Crocheted 4 in hands, all colors . \$2.00
 Embroidered Suspenders . . \$1.00 to \$7.00
 Gloves (lined or unlined) . . \$1.50 to \$5.00
 Umbrellas, good things . . \$2.00 to \$20.00
 Neck Mufflers and Dress Shirt Protectors.
 Ladies' Embroidered Garters and Handkerchiefs.

RAY, Men's Furnisher,

509 Washington, cor. West Street, 641 Washington, cor. Boylston Street, BOSTON, MASS.

BOSTON THEATRE. —
 Monday, February 6th,
 "The Country Circus."
 Evenings at 8; afternoons
 at 2.



TREMONT THEATRE. —
 Monday, February 6th,
 Neil Burgess in "The
 County Fair." Evenings
 at 8; afternoons at 2.

HOLLIS STREET THEATRE. — Monday, February 6th, John Drew in "The Masked Ball."
 Evenings at 8; matinees at 2.

COLUMBIA THEATRE. — Monday, February 6th, Rice's Surprise Party in "1492." Evenings
 at 8; afternoons at 2.

BOSTON MUSEUM. — Monday, February 6th, "Good-bye" and "Faithful James." Even-
 ings at 7.45; matinees at 2.

GLOBE THEATRE. — Monday, February 6th, Francis Wilson in "The Lion Tamer."
 Evenings at 8; matinees at 2.

BOWDOIN SQUARE THEATRE. — Monday, February 6th, "Old Jed Prouty." Evenings at
 8; matinees at 2.

CO-OPERATIVE TAILORS

TO NEARLY ALL THE SCHOOLS AND COLLEGES.

FRANK D. SOMERS,

No. 5 Park St., Boston.

Special designs in Woolens for Student trade. We do the largest Student trade
 of any fine tailoring firm in the country.

A. N. COOK & CO.,

IMPORTERS, MANUFACTURERS, JOBBERS AND DEALERS IN

FINE HATS AND FINE FURS,

377 and 379 Washington Street, opp. Franklin Street, Boston, Mass.

WE AIM FOR THE FINEST AND BEST. NEW AND CORRECT STYLES.

Seal skin garments to order, tailor measure, fit guaranteed. Furs received on storage, insured against moths and fire.

The Photographer

Hastings

Is now located at his **New Studio**, with Reception Room and Atelier only one Flight from the Street,

146 TREMONT STREET, OVER HUYLER'S, BOSTON, MASS.

Awarded the Grand Prize by the Photographers' Association of America, at Washington, D. C., 1890.

TELEPHONE CONNECTION.

O. F. Conly
Photographer

465 WASHINGTON ST., BOSTON.

CLASS WORK A SPECIALTY.

All sittings made by the proprietor.

GENTLEMEN!

I wish to call your attention to the fact that I am **paying the highest Cash Prices** for Cast-off **Clothing**. Also **Cleaning** and **Repairing** done at short notice. Send postal to

M. KEEZER,

613 Shawmut Ave., Boston, Mass.

COPLEY SQ. HOTEL,

Huntington Avenue ^{AND} Exeter Street.

AMERICAN AND EUROPEAN PLANS.

Cafe open from 7 A. M. to 12 P. M.

F. S. RISTEEN & CO.

YOUNG'S HOTEL, BOSTON.

J. R. WHIPPLE & CO.

J. R. WHIPPLE.

R. F. FORD.

J. B. WHIPPLE.

C. I. LINDSAY.

W. H. LAPOINTE.

C. M. HART.

PARKER HOUSE, BOSTON.

J. R. WHIPPLE & CO.

J. R. WHIPPLE.

R. F. FORD.

J. B. WHIPPLE.

C. I. LINDSAY.

W. H. LAPOINTE.

C. M. HART.

ARCHITECTURAL AND ART PHOTOGRAPHS,

For Students' use and for Room Decoration.

Special rates to Members of the M. I. T. Co-operative.

PHOTOGRAPH MOUNTING AND FRAMING.

SOULE PHOTOGRAPH CO., 338 WASHINGTON STREET,
BOSTON, MASS.

SPECIAL ATTENTION IS CALLED TO THE HIGH
GRADE OF PAPERS—THE MAKERS CLAIM
FOR THEM "THE BEST IN THE WORLD"—
FOR POLITE CORRESPONDENCE, THESIS
WORK, COMPOSITIONS AND LECTURE
NOTES (with various sizes of Covers to fit).
Sold by

C. E. RIDLER, Stationer,
Cor. Boylston and Berkeley Streets.

Scientific Books { **DAMRELL & UPHAM,**
The Old Corner Bookstore,
283 Washington St., Boston.

College Men Ride Columbias Because

THE COLUMBIA BICYCLE RECOMMENDS ITSELF

To the student of **mechanics** for
its construction :

To the student in the **arts** for its
beauty :

To the **athlete** for its speed :

And to **all** for its acknowledged
excellence.

HAVE YOU SEEN OUR '93 CENTURY?
Send for a Catalogue.

POPE MFG. CO.,
Boston, New York, Chicago, Hartford.

**STUDENTS, TRAVELING,
BUSINESS,
and PROFESSIONAL MEN
Insure in the Atlas.**

THE ATLAS ACCIDENT INSURANCE COMPANY,
OF BOSTON, MASS.
186 Devonshire Street, Boston, Mass.

Preferred
While traveling by Steam, Electricity or Cable,

Death by Accident.	Permanent Total Disability.	Loss of Both Eyes, Hands, or Feet.	Loss of Right Hand or either Foot.	Loss of Left Hand.	Loss of One Eye.	Weekly In- demnity will be paid for 52 Weeks.
\$5,000	\$2,500	\$5,000	\$2,500	\$1,250	\$650	\$25
5,000	2,500	5,000	2,500	2,500	1,000	50

HENRY E. TURNER, Pres. HUGH BROWNE, Sec. and Gen. Mgr. THOS. M. EVERETT, Supt. Agencies.
Any information in regard to Atlas Policies may be had of the Manager of Tech.

DAME, STODDARD & KENDALL,

We have a Complete Line of

Football Goods, and General Athletic Supplies,

Also CUTLERY, FISHING TACKLE, SKATES, and HAND CAMERAS.

New England Agents for The Elliptic Wheel, as ridden by Johnson, time 1.56 3-5.

DAME, STODDARD & KENDALL,

374 WASHINGTON STREET, - - BOSTON, MASS.

**THE
BRUNSWICK**

(American Plan.)

NEAR THE

Museum of Fine Arts,
New Old South, Trin-
ity (Phillips Brooks's)
Church, and OPPO-
SITE INSTITUTE of
TECHNOLOGY.

BOSTON'S

Grandest Hotel

BARNES & DUNKLEE

Proprietors.



**THE
VICTORIA.**

(Nearest European Plan
Hotel to M. I. T.)

In the Centre of Bos-
ton's Fashionable
District,
THE BACK BAY.

Opened November,
1886, and within one
week, the *Traveller*
said, "It has established
itself as the Delmonico
of Boston."

BOSTON

FOREIGN BOOKSTORE.

CARL SCHOENHOF,

144 Tremont St., Boston, Mass.

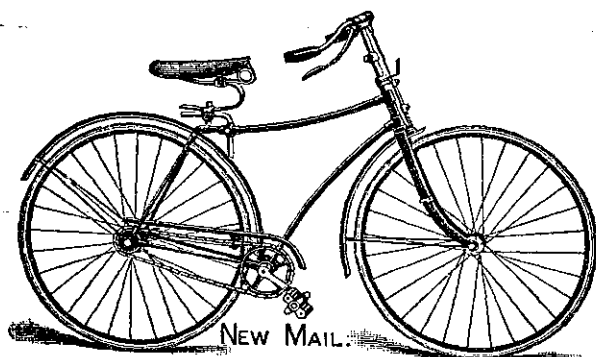
Liberal Discount to Tech. Students,
Especially on Works imported to order.

STUDENTS'

Note-Books, Paper, Envelopes, Stylo. Pens, and
Fairchilds and Franklin Pens, etc.

H. H. CARTER & Co., 3 Beacon St.

"CO-OPERATIVE STORE."



NEW MAIL.

CUSHION TIRES, \$100.

PNEUMATICS, \$120.

ALL DROP FORGINGS.

INTERCHANGEABLE PARTS.

Also, \$135 and \$150 GRADES; LADIES' \$100 and BOYS' \$35.

HANDSOMEST AND BEST WHEELS.

SECONDHAND WHEELS ALWAYS ON HAND.

GET CATALOGUE.

WM. READ & SONS, Manufacturers,

107 WASHINGTON STREET - - - - - BOSTON



The Richmond Straight Cut No. 1 Cigarettes.

Cigarette Smokers who are willing to pay a little more than the price charged for the ordinary trade cigarettes, will find this brand superior to all others.

The Richmond Straight Cut No. 1 Cigarettes are made from the brightest, most delicately flavored, and highest cost **Gold Leaf** grown in Virginia. This is the **Old and Original Brand of Straight Cut** Cigarettes, and was brought out by us in the year 1875.

Beware of imitations, and observe that the firm name as below is on every package.

The ALLEN & GINTER Branch of the American Tobacco Co., Manufacturers,
RICHMOND, VIRGINIA.

I. H. FARRINGTON, —Merchant Tailor,—

411 WASHINGTON STREET, BOSTON.

Suits to order, \$30, upwards. Overcoats to order, \$30, upwards. Trousers to order, \$8, upwards. Dress Suits to Let.

J. P. BOND, GENTLEMEN'S FURNISHING GOODS. NECKWEAR.

OUR \$1.00 OPEN FRONT AND BACK SHIRT A SPECIALTY.

Also, full line Collars, Cuffs, Underwear, Gloves, etc.

141 DARTMOUTH ST., BOSTON.

Agent Dartmouth Laundry. Work called for and delivered.

D. TOY,

TAILOR TO THE HARVARD CO-OPERATIVE.

71 BEACON STREET, BOSTON, MASS.

Opposite Public Garden.

Agent for Whitaker & Co. and Hill Bros., London, W.

Typewriters at the World's Fair.



The Remington Secures the Exclusive Contract.

The Committee of Ways and Means of the World's Columbian Exposition has awarded to Wyckoff, Seamans & Benedict (Remington Standard Typewriter) the contract for furnishing all the writing machines to be used on the Exposition grounds during the Fair. A large number will be placed at convenient points throughout all of the buildings, and are intended for the accommodation of the general public, representatives of the press, and the officers of the Exposition.—*Chicago Sunday Herald*, August 7, 1892.

WYCKOFF, SEAMANS & BENEDICT,
15 SCHOOL STREET, BOSTON.

GEO. H. GREENWOOD,

9 & 11 Boylston St.

Direct Importer of French and English Briarwoods,
Meerschaums and Fine Smoking Mixtures.

O. A. JENKINS & CO., COLLEGE HATTERS.

CORRECT STYLES.

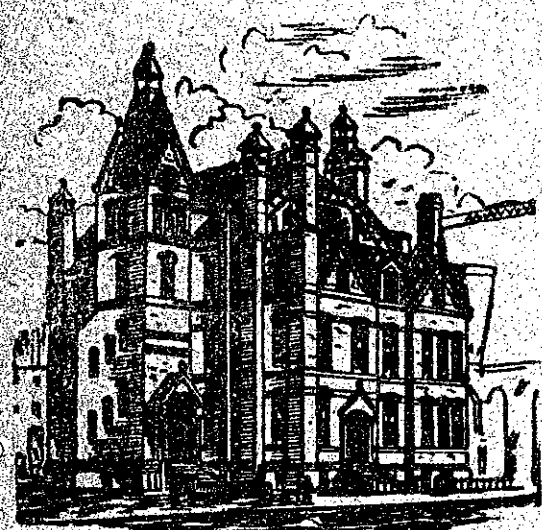
BEST QUALITY.



HEATH'S
LONDON + HATS

A well-selected line of
MACKINTOSHES
CANES and UMBRELLAS.

407 WASHINGTON STREET, BOSTON.



Preparation for the

Established in 1828.

Massachusetts Institute of Technology.

THIS HAS LONG BEEN A SPECIALTY AT

CHAUNCY HALL SCHOOL.

REFERENCE is made to the INSTITUTE FACULTY in regard to the thoroughness with which Chauncy-Hall pupils are fitted, not only for entering the Institute, but also for pursuing successfully their subsequent work. Preparation, also, for business and for college.

No. 393 Boylston Street, Boston.

(Very near the Institute.)

**SOCIETY PINS, BADGES, PRIZES, Etc.,
IN GOLD AND SILVER.**

H. M. RICHARDS & CO.,
MANUFACTURING JEWELERS,
7 GREEN STREET, - - - BOSTON.

UNIFORMS

CAPS AND GOWNS

We supply correct uniforms to Military Institutes in all parts of the United States.

We also supply Caps and Gowns for Graduating Classes of Universities and Colleges.

For particulars write to

G. W. Simmons & Co.,

Oak Hall, 32 to 44 North Street, Boston.